

6KT8

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

For Color-Killer, Sound IF Amplifier, and Band-pass-Amplifier Applications in TV Receivers

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC) 6.3 ± 0.6 volts

Current at heater volts = 6.3 0.600 amp

Peak heater-cathode voltage:

Unit: Triode Pentode^a

Heater negative with respect to cathode 200 max. 20 max. volts

Heater positive with respect to cathode 200^b max. 20 max. volts

Direct Interelectrode Capacitances:

Without External Shield With External Shield^c

Triode Unit:

G_T to P_T 3.0 3.0 pf

Input: G_T to (H+G_{3p}+I_S, K_T) . . . 3.2 3.2 pf

Output: P_T to (H+G_{3p}+I_S, K_T) . . . 1.6 2.4 pf

Pentode Unit:

G_{1p} to P_p 0.046 max. 0.030 max. pf

Input: G_{1p} to (H+G_{3p}+I_S, G_{2p}, K_p) . . 7.5 7.5 pf

Output: P_p to (H+G_{3p}+I_S, G_{2p}, K_p) . . 2.2 2.8 pf

G_T to P_p 0.018 max. 0.003 max. pf

G_{1p} to P_T 0.006 max. 0.002 max. pf

Characteristics, Class A₁ Amplifier:

Unit: Triode Pentode

Plate Voltage 250 125 volts

Grid-No.2 Voltage - 125 volts

Grid-No.1 Voltage -2 -1 volts

Amplification Factor 100 -

Plate Resistance (Approx.) 31500 150000 ohms

Transconductance 3200 10000 μ hos

Plate Current 1.8 12 ma

Grid-No.2 Current - 4.5 ma

Grid-No.1 Voltage (Approx.)

for plate $\mu_a = 20$ -3.5 -7 volts

Mechanical:

Operating Position Any

Type of Cathodes Coated Unipotential

Maximum Overall Length 2-3/16"

Maximum Seated Length 1-15/16"



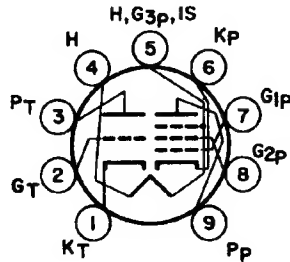
RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA
4-64

6KT8

Length, Base Seat to Bulb Top
(Excluding Tip) 1-9/16" \pm 3/32"
Diameter 0.750" to 0.875"
Dimensional Outline. See *General Section*
Bulb T6-1/2
Base Small-Button Noval 9-Pin (JEDEC No. E9-1)
Basing Designation for BOTTOM VIEW 9QP

Pin 1-Triode Cathode
Pin 2-Triode Grid
Pin 3-Triode Plate
Pin 4-Heater
Pin 5-See Footnote ^a
(Heater, Pentode
Grid No.3,
Internal Shield)
Pin 6-Pentode Cathode
Pin 7-Pentode Grid No.1
Pin 8-Pentode Grid No.2
Pin 9-Pentode Plate



AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

	Unit:	Triode	Pentode	
Plate Voltage.		330 max.	330 max.	volts
Grid-No.2 Supply Voltage		-	330 max.	vqlts
Grid-No.2 Voltage.		See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section		
Grid-No.1 Voltage:				
Positive-bias value.		0 max.	0 max.	volts
Grid-No.2 Input:				
For grid-No.2 voltages up to 165 volts.		-	0.55 max.	watt
For grid-No.2 voltages between 165 and 330 volts.		See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section		
Plate Dissipation.		1 max.	2.5 max.	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:				
For fixed-bias operation		0.5 max.	0.25 max.	megohm
For cathode-bias operation		1 max.	1 max.	megohm

^a Pin No.5 (Pentode Grid No.3, Internal Shield, and Heater) should be operated at or near ground potential. If the peak cathode-to-grid-No.3 voltage exceeds +20 volts, undesirable changes in the tube characteristics may result.

^b The dc component must not exceed 100 volts.

^c With external shield JEDEC No.315 connected to pins 4 and 5.